

Title (en)
METHOD FOR PREPARING SUCROSE-6-ESTER

Title (de)
VERFAHREN ZUR HERSTELLUNG VON SACCHAROSE-6-ESTER

Title (fr)
PROCÉDÉ DE PRÉPARATION DE SUCROSE-6-ESTER

Publication
EP 4144744 A1 20230308 (EN)

Application
EP 20952776 A 20200910

Priority
CN 2020114505 W 20200910

Abstract (en)
Provided is a method for preparing a sucrose-6-ester, including: preparing a reaction solution of sucrose and an organo-tin compound; atomizing the reaction solution to form droplets; thoroughly mixing and contacting the droplets with a gasified dehydration medium such that the droplets undergo a dehydration reaction to obtain an intermediate mixture containing sucrose organic tin ester droplets; separating the intermediate mixture to obtain a sucrose organic tin ester solution and a dehydrated gas-liquid mixture; recovering the sucrose organic tin ester solution obtained in the separation step and cycling to the atomization and dehydration steps several times; and subjecting an organic acid anhydride to an acylation reaction with the sucrose organic tin ester solution to obtain the sucrose-6-ester. In the present disclosure, the method can achieve the rapid and efficient dehydration of the esterification reaction in a very short period of time, efficiently prepare a sucrose organic tin ester intermediate, and greatly reduce the decomposition of saccharides in a system and the occurrence of side reactions. In addition, the method has a low energy consumption, high product yield, strong selectivity, and a more thorough sucrose reaction degree.

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